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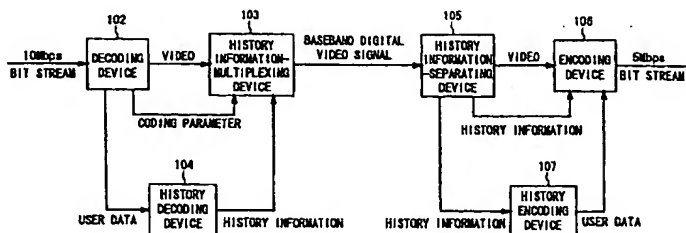
(54) **CODING SYSTEM AND ITS METHOD, CODING DEVICE AND ITS METHOD, DECODING DEVICE AND ITS METHOD, RECORDING DEVICE AND ITS METHOD, AND REPRODUCING DEVICE AND ITS METHOD**

(57) The present invention relates to a transcoder for executing a re-coding process on an encoded stream generated based on an MPEG standard in order to generate a re-coded stream having a different GOP (Group of Pictures) structure or bit rate.

Specifically, a decoding device of a transcoder 106 decodes a source encoded stream to generate decoded video data and extracts past coding parameters superposed in the encoded stream as history_stream(). In this case, the decoding device extracts the past coding parameters based on information superposed in the encoded stream as re_coding_stream_info().

An encoding device receives the decoded video data and the past coding parameters and uses the past

coding parameters to carry out an encoding process in a manner such that this process will not degrade image quality, thereby generating a re-coded stream. Further, the encoding device selects one of the past coding parameters which are optimal for an application connectively following the encoding device and describes only the selected past coding parameters in the encoded stream as history_stream(). The encoding device superposes, as re_coding_stream_info(), information indicating the selected past coding parameters so that the following application can properly extract the coding parameters for the history_stream() from the re-coded stream.



TRANSCODER 101

FIG. 14

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